

## Title (en)

Poly(oxyalkylene) pyridyl and piperidyl esters and fuel compositions containing the same

## Title (de)

Poly(oxyalkylen)pyridyl- und -Piperidylester und dieselben enthaltende Brennstoffzusammensetzungen

## Title (fr)

Esters de poly(oxyalkylène)-yle et de pyridyle et pipéridyle respectivement et compositions de combustible les contenant

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**EP 1057881 A3 20010124 (EN)**

## Application

**EP 00304505 A 20000526**

## Priority

US 32460299 A 19990602

## Abstract (en)

[origin: EP1057881A2] A poly(oxyalkylene) pyridyl or piperidyl ester having the formula: <CHEM> or a fuel-soluble salt thereof; wherein A is a nitrogen-containing ring selected from the group consisting of 3-pyridyl, 4-pyridyl, 3-piperidyl and 4-piperidyl; R1 and R2 are independently hydrogen or lower alkyl having 1 to about 6 carbon atoms and each R1 and R2 is independently selected in each -O-CHR1-CHR2- unit; R3 is hydrogen, alkyl having 1 to about 100 carbon atoms, phenyl, aralkyl having about 7 to about 100 carbon atoms or alkaryl having about 7 to about 100 carbon atoms; x is an integer from 0 to 4; and n is an integer from about 5 to about 100. The poly(oxyalkylene) pyridyl and piperidyl esters of the present invention are useful as fuel additives for the prevention and control of engine deposits.

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## IPC 8 full level

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## Citation (search report)

- [Y] US 3303198 A 19670207 - HANS SUTER, et al
- [DPY] US 5942014 A 19990824 - NELSON KENNETH D [US]
- [DY] US 5407452 A 19950418 - CHERPECK RICHARD E [US]
- [A] EP 0801128 A1 19971015 - NIPPON OIL CO LTD [JP]
- [XY] NAKA K ET AL: "SYNTHESIS OF A STAR-SHAPED POLYMER VIA COORDINATION OF ESTER-LINKEDPYRIDYL-TERMINATED POLY(OXYETHYLENE) WITH RU(II)", MACROMOLECULAR: RAPID COMMUNICATIONS,DE,WILEY VCH, WEINHEIM, vol. 18, no. 12, 1 December 1997 (1997-12-01), pages 1025 - 1032, XP000738970, ISSN: 1022-1336
- [X] DAL POZZO A ET AL: "NEW MONOFUNCTIONAL DERIVATIVES OF POLY(ETHYLENE GLYCOL)S VIA MONOTRITYL INTERMEDIATES", MAKROMOLEKULARE CHEMIE, MACROMOLECULAR CHEMISTRY AND PHYSICS,CH,HUTHIG UND WEPF VERLAG, BASEL, vol. 190, no. 10, 1 October 1989 (1989-10-01), pages 2457 - 2461, XP000136155, ISSN: 0025-116X

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